

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6:

(11) International Publication Number:

WO 96/42131

H02H 3/16, 3/00, 5/04, H01H 31/02, G08B 21/00

(43) International Publication Date: 27 December 1996 (27.12.96)

(21) International Application Number:

PCT/US95/07571

(22) International Filing Date:

12 June 1995 (12.06.95)

(81) Designated States: AU, BR, CA, CN, JP, KR, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).

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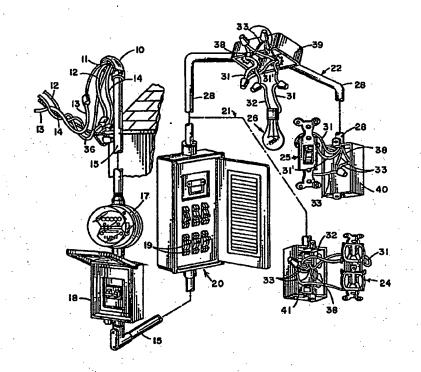
Published

With international search report.

(54) Title: ELECTRICAL WIRING SYSTEM WITH OVERTEMPERATURE PROTECTION

(57) Abstract

A household electrical service (10) is protected against overheating by running a sensor line or wire (36 or 38), coextensively together with hot, neutral and ground lines or wires (12, 13, 14 or 31, 32, 33), from a power company hookup (50) to a main breaker switch (18), and from respective branch circuit breakers (19) throughout the branch circuits (21, 22). The sensor line or wire (36 or 38) may be a length of heat fusible or otherwise temperature variant material which has a load end connected to ground and a source end connected to a control circuit (51) which trips the breaker (18 or 19) when an overtemperature condition melts the wire. Protection is extended through to individual devices (43) by continuing the sensor wire through the device cord (42). For this purpose, a plug ground prong (46) and receptacle ground prong connection (45) provide isolated ground and sensor wire connections. In a modified installation, fiber optic paths (38') are used in place of conductive wires and LED circuits replace load end ground connection.



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